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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/575,123	05/23/2000	Kia Silverbrook	NPA006US	9158
24011 7590 05/25/2007 SILVERBROOK RESEARCH PTY LTD 393 DARLING STREET BALMAIN, 2041 AUSTRALIA			EXAMINER RIES, LAURIE ANNE	
			ART UNIT 2176	PAPER NUMBER
			MAIL DATE 05/25/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.		Applicant(s)	
	09/575,123		SILVERBROOK ET AL.	
	Examiner		Art Unit	
	Laurie Ries		2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-9 and 11-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-9 and 11-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 May 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/2/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to communications: Amendment, filed 26 March 2007, and IDS, filed 2 March 2007, to the Original Application, filed 23 May 2000.
2. Claims 1, 5-8, 11-12, and 14 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Dougherty (U.S. Patent 6,540,141 B1) in view of Fateh (U.S. Patent 6,184,847 B1).
3. Claim 2 remains rejected under 35 U.S.C. 103(a) as being unpatentable over Dougherty (U.S. Patent 6,540,141 B1) in view of Fateh (U.S. Patent 6,184,847 B1) and Walker (U.S. Patent 5,995,976).
4. Claim 3 remains rejected under 35 U.S.C. 103(a) as being unpatentable over Dougherty (U.S. Patent 6,540,141 B1) in view of Fateh (U.S. Patent 6,184,847 B1) and Greening (U.S. Publication 2001/0013009 A1).
5. Claim 9 remains rejected under 35 U.S.C. 103(a) as being unpatentable over Dougherty (U.S. Patent 6,540,141 B1) in view of Fateh (U.S. Patent 6,184,847 B1) and Dymetman ("Intelligent Paper", Xerox Research Centre Europe).

6. Claim 13 remains rejected under 35 U.S.C. 103(a) as being unpatentable over Dougherty (U.S. Patent 6,540,141 B1) in view of Fateh (U.S. Patent 6,184,847 B1) and Franklin ("A Framework for Scalable Dissemination-Based Systems", ACM SIGPLAN Notices).

7. Claims 1-3, 5-9, and 11-14 are pending. Claim 1 is an independent claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 5-8, 11-12, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dougherty (U.S. Patent 6,540,141 B1) in view of Fateh (U.S. Patent 6,184,847 B1).

As per independent claim 1, Dougherty discloses a system and method for delivering a page of an interactive printed periodical on demand, where the page includes coded tags, each tag containing coded data (See Dougherty, Column 9, lines 15-18) indicative of a page identity and of its own location on the page and enabling a user to indicate a request for further information relating to the contents of the periodical

by interacting with an interactive element on the page, the system and method including determining a unique page identity for the page in a computer system (See Dougherty, Column 5, lines 65-67, lines, 44-49, and Figure 1, element 33).

Dougherty also discloses determining a page description for the page in the computer system including a description of graphical information on the page and the description of the interactive element including a zone of the interactive element on the page (See Dougherty, Column 7, lines 3-34, and Column 8, lines 55-66).

Dougherty also discloses associating the page identity with the description of the interactive element (See Dougherty, Column 9, lines 10-21).

Dougherty also discloses generating first dot data, or data to be printed on a substrate, for the coded data using the page identity (See Dougherty, Column 9, lines 15-18).

Dougherty also discloses printing the page onto a substrate using the dot data on a printer networked with the computer system so as to produce a printed page of the periodical (See Dougherty, Column 9, lines 21-26, and Figure 3, element 208).

Dougherty also discloses that the step of determining a unique page identity and determining a page description for the page are performed prior to printing the page (See Dougherty, Figure 3).

While Dougherty does not disclose expressly that second dot data is generated for the graphical information using at least part of the page description, it was well known in the art to generate graphical data to be printed using a graphical interface. At the time of the invention it would have been obvious to one of ordinary skill in the art to

generate second dot data for the page description. The motivation for doing so would have been to draw a user toward a particular portion of a physical medium, such as a portion containing an interactive element, through the use of text, coloring, or other graphical elements describing a page and including a specific region or zone with which the user may interact (See Dougherty, Column 7, lines 3-10).

While Dougherty discloses tags containing coded data, Dougherty does not disclose expressly including data indicative of a relative orientation. Fateh discloses using a gyroscope to determine the orientation of a sensing device based upon the pitch and yaw degrees of freedom (See Fateh, Column 11, lines 48-59, and Column 12, lines 52-59).

Dougherty and Fateh are analogous art because they are from the same field of endeavor of determining user input from sensing devices.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the analysis of the yaw, or direction, of a sensing device in order to determine relative orientation of Fateh with the tags containing coded data of Dougherty. The motivation for doing so would have been to determine the direction in which the user is attempting to move the sensing device, thus generating additional data regarding the user's intentions to access the various coded data within the zones contained on the page. Therefore, it would have been obvious to combine Fateh with Dougherty for the benefit of determining the direction in which the user is attempting to move the sensing device, thus generating additional data regarding the user's intentions

to access the various coded data within the zones contained on the page, to obtain the invention as specified in claim 1.

As per dependent claim 5, Dougherty and Fateh disclose the limitations of claim 1 as described above. Dougherty also discloses receiving in the computer system indicating data from a sensing device regarding the identity of the page and of a position of the sensing device relative to the page in order to identify the page and determine when the sensing device is used to interact with the elements (See Dougherty, Column 7, lines 28-67). Dougherty also discloses receiving movement data regarding the position of the sensing device relative to the page (See Dougherty, Column 7, lines 24-27). Fateh also discloses using a gyroscope to determine the orientation of a sensing device based upon the pitch and yaw degrees of freedom (See Fateh, Column 11, lines 48-59, and Column 12, lines 52-59). Dougherty and Fateh are analogous art because they are from the same field of endeavor of determining user input from sensing devices. At the time of the invention it would have been obvious to one of ordinary skill in the art to include the analysis of the yaw, or direction, of a sensing device in order to determine relative orientation of Fateh with the human/computer interface of Dougherty and Fateh. The motivation for doing so would have been to determine the direction in which the user is attempting to move the sensing device, thus generating additional data regarding the user's intentions to access the various coded data within the zones contained on the page. Therefore, it would have been obvious to combine Fateh with Dougherty and Fateh for the benefit of determining the direction in which the user is attempting to move the sensing device, thus generating additional data regarding the

user's intentions to access the various coded data within the zones contained on the page, to obtain the invention as and Fateh the limitations of claim 5 as described above.

As per dependent claim 7, Dougherty and Fateh disclose the limitations of claim 6 as described above. Dougherty also discloses that the sensing device senses its movement relative to the page using the coded data and identifies the response in the computer system from the movement being at least partially within a zone associated with interactive elements (See Dougherty, Column 11, lines 26-53).

As per dependent claim 8, Dougherty and Fateh disclose the limitations of claim 5 as described above. Dougherty also discloses that the sensing device includes an identity code for a specific user and that the method includes monitoring the sensing device (See Dougherty, Column 12, lines 54-65).

As per dependent claim 11, Dougherty and Fateh disclose the limitations of claim 1 as described above. Dougherty also discloses printing the coded data to be substantially invisible in the visible spectrum, such as by using infrared inks (See Dougherty, Column 5, lines 37-39).

As per dependent claim 12, Dougherty and Fateh disclose the limitations of claim 1 as described above. It was well known in the art that electronically coded data is stored in a retrievable record within a computer system. At the time of the invention it would have been obvious to one of ordinary skill in the art to retain a copy of the printed page in the computer system. The motivation for doing so would have been to allow multiple users to create and exchange their own encoded physical mediums (See Dougherty, Column 13, lines 43-49).

As per dependent claim 14, Dougherty and Fateh disclose the limitations of claim 1 as described above. Dougherty also discloses that the periodical is printed on multiple pages, such as in the form of a book (See Dougherty, Column 11, lines 26-29).

9. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dougherty (U.S. Patent 6,540,141 B1) in view of Fateh (U.S. Patent 6,184,847 B1) as applied to claim 1 above, and further in view of Walker (U.S. Patent 5,995,976).

As per dependent claim 2, Dougherty and Fateh the limitations of claim 1 as described above. Dougherty and Fateh do not disclose expressly that the further information includes editorial content. Walker discloses including editorial information in relation to publishing information electronically (See Walker, Column 1, lines 14-18, and Column 2, lines 12-15). Dougherty, Fateh, and Walker are analogous art because they are from the same field of endeavor of distributing data electronically. At the time of the invention it would have been obvious to a person of ordinary skill in the art to include the editorial content of Walker with the information delivery method of Dougherty and Fateh. The motivation for doing so would have been to allow "surplus" information to be distributed to users thereby increasing profitability for the publisher (See Walker, Column 2, lines 24-39). Therefore, it would have been obvious to combine Walker with Dougherty and Fateh for the benefit of allowing surplus information to be distributed to users thereby increasing profitability for the publisher to obtain the invention as specified in claim 2.

10. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dougherty (U.S. Patent 6,540,141 B1) in view of Fateh (U.S. Patent 6,184,847 B1) as applied to claim 1 above, and further in view of Greening (U.S. Publication 2001/0013009 A1).

As per dependent claim 3, Dougherty and Fateh disclose the limitations of claim 1 as described above. Dougherty and Fateh do not disclose expressly that the further information relates to advertising material. Greening discloses the inclusion of advertising materials based on a demographic profile of a user. (See Greening, Page 1, paragraph 0015). Dougherty, Fateh, and Greening are analogous art because they are from the same field of endeavor of presenting information to users over a computer network. At the time of the invention it would have been obvious to a person of ordinary skill in the art to include the advertising information based on user demographics of Greening with the further information of Dougherty and Fateh. The motivation for doing so would have been to create a personalized experience for the user. (See Greening, Page 1, paragraph 0014). Therefore, it would have been obvious to combine Greening with Dougherty and Fateh for the benefit of providing a personalized experience for the user to obtain the invention as specified in claim 3.

11. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dougherty (U.S. Patent 6,540,141 B1) in view of Fateh (U.S. Patent 6,184,847 B1) as applied to claim 1 above, and further in view of Dymetman ("Intelligent Paper", Xerox Research Centre Europe).

As per dependent claim 9, Dougherty and Fateh disclose the limitations of claim 1 as described above. Dougherty and Fateh do not disclose expressly printing the periodical on demand. Dymetman discloses printing a periodical containing coded data (See Dymetman, Page 399, paragraphs 2-4). Dougherty, Fateh, and Walker are analogous art because they are from the same field of endeavor of distributing data electronically. At the time of the invention it would have been obvious to a person of ordinary skill in the art to include the on demand printing of a periodical containing coded data of Dymetman with the coded tags of Dougherty and Fateh. The motivation for doing so would have been to allow a user to interact with the coded data contained within the periodical using a sensing device, such as a pointer, to access various portions of the content (See Dymetman, Pages 395-396, Section 2). Therefore, it would have been obvious to combine Dymetman with Dougherty and Fateh for the benefit of allowing a user to interact with the coded data contained within the periodical using a sensing device, such as a pointer, to access various portions of the content, to obtain the invention as specified in claim 9.

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12. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dougherty (U.S. Patent 6,540,141 B1) in view of Fateh (U.S. Patent 6,184,847 B1) as applied to claim 1 above, and further in view of Franklin ("A Framework for Scalable Dissemination-Based Systems", ACM SIGPLAN Notices).

As per dependent claim 13, Dougherty and Fateh disclose the limitations of claim 1 as described above. Dougherty and Fateh do not disclose expressly including distributing information using a mixture of multicast and PointCast communications protocols. Franklin discloses using a combination of delivery mechanisms, including both PointCast and multicast. (See Franklin, Page 97, column 1, paragraph 5).

Dougherty, Fateh, and Franklin are analogous art because they are from the same field of endeavor of delivering information electronically. At the time of the invention it would have been obvious to a person of ordinary skill in the art to include the combination of delivery mechanisms of Franklin with the system and method of Dougherty and Fateh. The motivation for doing so would have been to control the costs of initiating the transfer of data. (See Franklin, Page 5, column 2, paragraph 2) Therefore, it would have been obvious to combine Franklin with Dougherty and Fateh for the benefit of controlling data transfer costs to obtain the invention as specified in claim 13.

Response to Arguments

13. Applicant's arguments filed 26 March 2007 have been fully considered but they are not persuasive.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Applicant argues that Dougherty in view of Fateh fails to teach that each tag printed on the periodical contains coded data identifying a page identity, its own location on the page and its relative orientation. The Office respectfully disagrees. While Dougherty discloses tags containing coded data, Dougherty does not disclose expressly including data indicative of a relative orientation. Fateh discloses using a gyroscope to determine the orientation of a sensing device based upon the pitch and yaw degrees of freedom (See Fateh, Column 11, lines 48-59, and Column 12, lines 52-59).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it would have

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been obvious to one of ordinary skill in the art to include the analysis of the yaw, or direction, of a sensing device in order to determine relative orientation of Fateh with the tags containing coded data of Dougherty to determine the direction in which the user is attempting to move the sensing device, thus generating additional data regarding the user's intentions to access the various coded data within the zones contained on the page.

Conclusion

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laurie Ries whose telephone number is (571) 272-4095. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon, can be reached at (571) 272-4136.

16. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LR

William L. Bashore
WILLIAM BASHORE
PRIMARY EXAMINER